

a jasmonate-related [compound] compounds or [an] alkyl [ester] esters thereof, (b) [an] antiethylene [agent] agents, and (c) [an inhibitor] inhibitors of phenylpropanoid metabolism.

3. (amended) The method of claim 1, wherein [said] a jasmonate-related compound or an alkyl ester thereof is added to the one or more nutrient media.

6. (amended) The method of claim 3, wherein the jasmonate-related [compounds are] compound is in a concentration from  $10^{-5}$  to  $2 \times 10^{-4}$  M.

7. (amended) The method of claim 3, wherein the jasmonate-related compound is at least one compound selected from the group consisting of jasmonic acid [and its alkyl esters,] and dihydrojasmonic acid [and its alkyl esters, and related derivatives and analogs].

9. (twice amended) The method of claim 8, wherein [the] said alkyl ester of jasmonic acid comprises an alkyl group esterified to jasmonic acid, wherein said alkyl group has from one to four carbon atoms.

12. (amended) The method of claim 11, wherein the heavy metal [is cobalt] ions are cobalt ions, the heavy metal complexes are cobalt complexes, and the heavy metal-containing compounds are cobalt-containing compounds.

39. (amended) The method of claim 1, wherein the amount of said one or more taxanes recovered is at least 3-fold greater than the amount obtained from [uninduced suspension culture] cells of *Taxus* species cultured without addition of any enhancement agents selected from the group consisting of (a) jasmonate-related compounds or alkyl esters thereof, (b) antiethylene agents, and (c) inhibitors of phenylpropanoid metabolism.

40. (amended) The method of claim 1, wherein the amount of said one or more taxanes recovered is at least 5-fold greater than the amount obtained from [uninduced

suspension culture] cells of *Taxus* species cultured without addition of any enhancement agents selected from the group consisting of (a) jasmonate-related compounds or alkyl esters thereof, (b) antiethylene agents, and (c) inhibitors of phenylpropanoid metabolism.

41. (twice amended) The method of claim 1, wherein [the] said one or more taxanes recovered is at least one compound selected from the group consisting of taxol, 7-epitaxol, 10-deacetyl-7-epitaxol, cephalomannine, 10-deacetyltaxol, 7-xylosyl-10-deacetyltaxol, baccatin III, and 10-deacetylbaccatin III.

42. (twice amended) The method of claim 1, wherein the cells are cultured in a first medium having a first composition, then the medium composition is changed to a second medium having a second composition [to induce] which induces taxane production.

46. (twice amended) The method of claim 1, wherein the cells are cultured in media containing saccharide in a concentration of 1 - 150 g/L, [and] nitrate ion in a concentration of 0.3 - 70 mM, or a combination thereof.

49. (amended) The method of claim 42, further [comprising exchanging nutrient medium at least once during taxane production] wherein the medium which induces taxane production is replenished during cultivation by periodic nutrient medium exchange.

66. (amended) The method of claim 3, wherein the cells are cultured in media containing saccharide in a concentration of 1 - 150 g/L, [and/or] nitrate ion in a concentration of 0.3 - 70 mM, or a combination thereof.

69. (amended) The method of claim [71] 68, wherein said amino acids, said polyamines, or a combination thereof are added to at least one of the one or more nutrient media.

Please add new claims 71 and 72, as follows:

71. (new) The method of claim 2, wherein the concentration of silver ions, silver complexes, and silver-containing compounds is 0.01  $\mu\text{M}$  – 10  $\mu\text{M}$ .

72. (new) A method for producing one or more taxanes in high yields in cell culture of a *Taxus* species comprising: cultivating in suspension culture, in one or more nutrient media under growth and product formation conditions, cells of a *Taxus* species derived from callus or suspension cultures, and recovering said one or more taxanes from said cells, said medium of said cell culture, or both, wherein  $\beta$ -phenylalanine is added to the one or more nutrient media.

#### **REQUEST FOR RECONSIDERATION**

It is unclear to Applicants why claims 6-20 are not included in the list of pending claims or in the list of claims considered on the merits, particularly in view of the fact that some of the claims within this group (claims 7, 9, and 12) are specifically addressed in the Office Action. Claims 6-20 were included in the application as filed and have not been cancelled by Applicants. Applicants believe that the omission of claims 6-20 is an error, and are therefore responding to the Office Action under the assumption that claims 6-20 are still pending.

Claims 1-3, 6-21, and 24-70 are pending in this application and stand rejected under 35 U.S.C. § 112. Applicants acknowledge with appreciation that the Examiner has indicated that the claims are free of the art of record. Applicants are amending the specification to correct omissions and typographical errors. Applicants are amending claims 1, 3, 6, 7, 9, 12, 39-42, 46, 49, 66, and 69 to facilitate prosecution and in the interest of clarity and definiteness. Applicants are amending claims 3 and 6 in view of the amendment to claim 1.

Applicants are adding new claims 71 and 72 to specifically claim additional aspects of the present invention, which aspects are fully supported in the specification as filed. Applicants do not believe that either of new claims 71 nor 72 correspond to any claims in United States Patent 5,637,484 to Yukimune et al.

No new matter is added by these amendments and additions; and they are fully supported by the specification as filed. Applicants respectfully request entry of these amendments and new claims. Further, Applicants respectfully request that the Examiner reconsider the above-captioned patent application in view of the foregoing amendments and the following remarks.

### **REMARKS**

#### **Amendments to the Specification**

Applicants are amending page 7, lines 23 and 28; page 11, line 28; page 13, lines 16 and 20; page 14, lines 4, 5-6, and 20; page 16, line 10; page 18, line 28; page 19, line 5; page 22, line 4; page 26, line 3; page 30, line 16; page 31, lines 22 and 28; page 35, line 1; and page 58, line 10 to correct misspellings, grammatical mistakes, and other typographical errors. The correct form is readily apparent to one skilled in the art upon reading the disclosure. Therefore, these amendments add no new matter to the disclosure as filed in the subject application.

Applicants seek to amend page 9, lines 22 and 23 to identify the upper panel and the lower panel described on page 9 as Fig. 5A and Fig. 5B, respectively. Figure 5 consists of two panels, which are labeled “Fig. 5A” and Fig. 5B.” These panels appear on two separate pages in the application as-filed, not in upper and lower positions, as they are identified on page 9 of the specification as-filed. Considering the contents of Fig. 5, it is readily apparent to one skilled in the art (1) that the “upper panel” which “tabulates the data” is Fig. 5A and (2) that the “lower panel”